Sept. 16, 1952 M. FLAMENT 2,610,868

EXPANDING FOLDER AND METHOD OF MANUFACTURING SAME

Filed May 22, 1940

Fig. 1

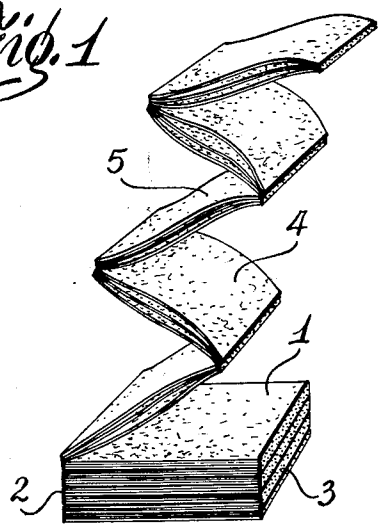
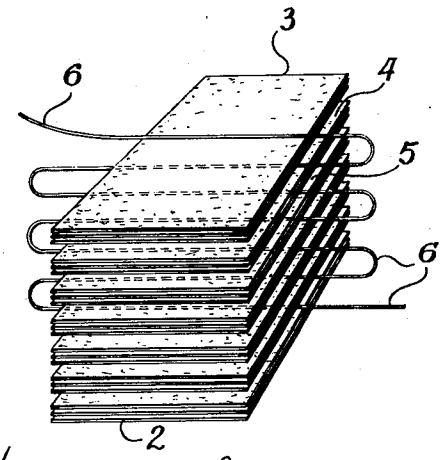


Fig. 2



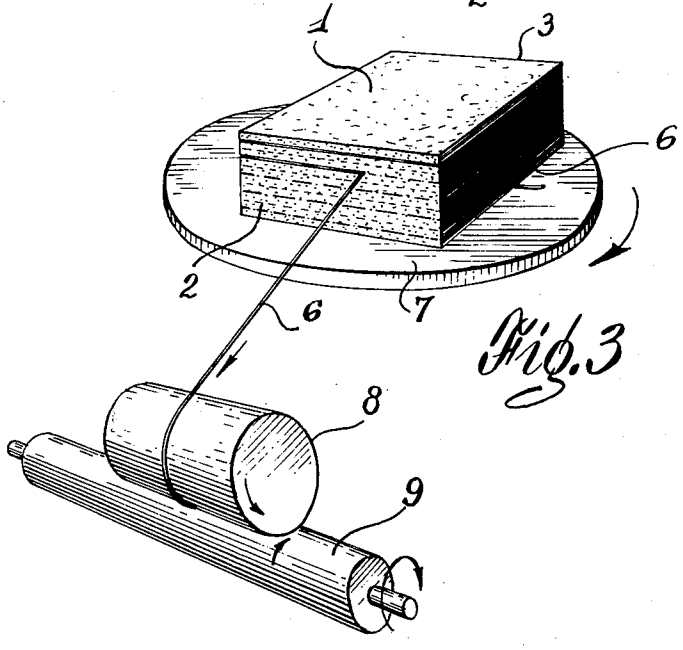


Fig. 3

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EXPANDING FOLDER AND METHOD OF MANUFACTURING SAME

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7 Claims. (Cl. 282—11.5)

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The present invention relates to expanding folders of the concertina type and more particularly to a stack of multifold inter-connected separate sheets or pads formed from a plurality of separate sheets capable of being longitudinally expanded for use in connection with typewriting, bookkeeping and the like machines whereby recordings may be made upon each of sheets having among its principal objects to provide a stack of recording sheets of the aforesaid character in which sheets of the same or different kinds of quality or of different colors may be employed.

Another equally important object of the invention is to provide expanding folders of the concertina type in which each folder consists of a pad or a plurality of individual sheets of paper having the desired indicia thereon whereby duplicate recordings may be obtained and adhesively connecting said sheets of paper of each folder together whereby they will be retained in perfect accuracy of delineation until the sheets of paper are separated for filing or other extended use.

A still further object of the invention is to provide a novel method of economically manufacturing expanding folders of the aforesaid character which comprises the steps of arranging a predetermined number of separate sheets of paper to form a folder, adhesively connecting the sheets of each folder together, superimposing said folders into a stack, trimming or dressing said sheets whereby their opposed edges will be in vertical alignment throughout the stack, applying glue which will remain flexible after drying to said vertically aligned and opposed edges of the stacks and finally severing alternate opposite adhesively connected edges of said folders whereby the remaining adhesively connected edges of said folders will permit the latter to be expanded.

The annexed drawings show diagrammatically, as a type of non-restrictive example, a specimen of a multifold leaflet or folder of the concertina type, and the method of carrying out the same.

Fig. 1 illustrates in perspective a stack of folders of the concertina type made in accordance with the present invention with several of the folders expanded therefrom.

Fig. 2 illustrates in perspective several of the folders arranged in spaced relation one upon the other to illustrate the position of the continuous severing thread or cord when placed therebetween, and

Fig. 3 illustrates in perspective an apparatus for withdrawing the severing thread from a preformed stack of folders placed thereupon.

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In the accompanying drawings, the numeral 1 indicates a stack of expandable leaflets or folders and each may consist of a single sheet of paper when only a single recording is required or a pad of separate sheets of paper when duplicate recordings are required. When a folder contains two or more separate sheets of paper, their front and rear edges as indicated by the numerals 2 and 3 respectively are adhesively connected together so as to prevent the sheets of paper of each folder from moving or shifting in respect to one another. As the so formed folders 4 and 5 are placed one upon the other to form a stack, a continuous thread 6 is inserted between the folders in the manner as illustrated in Fig. 2 of the drawings. The opposed edges 2 and 3 of the stack of folders are then trimmed or dressed so that they will be in vertical alignment throughout the entire stack.

A coating of glue is then applied to the so trimmed and opposed edges 2 and 3. The glue employed will remain flexible and yieldable after drying and is preferably obtained by dissolving latex rubber with one of its solvents and if required appropriate fats or inert components may be added thereto.

The opposite ends of each section of the thread that are positioned between the folders 4 and 5 extend through the unattached edges thereof or those edges that are positioned at right angles to the attached edges 2 and 3.

The opposite faces 2 and 3 of the stack, being then coated with an appropriate glue, the severing of each group of sheets in their proper order is obtained by pulling of the thread.

The successive severing of the glue on each side of the stack can be obtained by placing the said pile on a revolving platform 7 to allow a continuous pulling of the thread which can be mechanically obtained by means of a winder comprising a bobbin 8 rotated moving cylinder 9.

Single sheeted or multifold concertina type folders are thereby obtained with a perfect accuracy of delineation: the sheets being unable to overlap or slip and their use in typewriter and bookkeeping machines is made possible.

The possibility of printing upon the sheets with conventional type of printing machines enables manufacturers to use all kinds of papers of different qualities or colors, without compelling them to be limited to the standardised sizes imposed by the special machinery using paper in reels.

Further operations such as perforation, numbering, partial or total carbon coating made by

any of the known processes are also made possible.

It is also possible to obtain an undetermined number of copies by printing only alternate sheets and inserting carbon paper therebetween, or by applying a carbon coating upon the back of the sheets.

What I claim is:

1. A method for manufacturing a folder of the concertina type made up by a succession of distinct sheets of paper joined together at their front and rear edges by a glue which keeps flexible after drying up, which comprises stacking the sheets, dressing the two opposite faces of the stack which correspond to the folds of the concertina folder, laying threads between adjacent sheets, gluing said opposite faces of the stack, drying up the glue, severing alternate opposite edges of the stack by pulling the thread alternately at each side of the stack.

2. A method for manufacturing a folder of the concertina type made up by a succession of distinct sheets of paper joined together at their front and rear edges by a glue which keeps flexible after drying up, which comprises stacking the sheets, laying between each sheet, when stacking same, a thread going alternatively from right to left and from left to right, dressing the two opposite faces of the stack which correspond to the folds of the concertina folder, gluing said opposite faces of the stack, drying up the glue, severing alternate opposite edges of the stack by pulling the thread alternately at each side of the stack.

3. A method for manufacturing a folder of the concertina type made up by a succession of groups of superimposed distinct sheets of different qualities and kinds, wherein the front and rear edges of the sheets of each group are joined together and to corresponding edges of the sheets of the adjacent groups by means of a glue which keeps flexible after drying up, which comprises stacking the said groups of sheets, laying between each group, when stacking, a thread going alternately from right to left and from left to right, dressing the two opposite faces of the stack which correspond to the folds of the concertina folder, gluing said opposite faces of the stack, drying up the glue, severing alternate opposite edges of the stack by pulling the thread alternately at each side of the stack.

4. A method for manufacturing a folder of the concertina type made up by a succession of distinct sheets of paper joined together at their front and rear edges by a glue which keeps flexible after drying up, which comprises stacking the sheets, laying between each sheet, when stacking same, a thread going alternately from right to left and from left to right, dressing the two opposite faces of the stack which correspond to the folds of the concertina folder, gluing said opposite faces of the pile, drying up the glue, placing the stack on a revolving plate, severing alternate opposite edges of the stack by pulling the thread alternately at each side of the stack.

5. A method for manufacturing a folder of the concertina type made up by a succession of distinct sheets of paper joined together at their front and rear edges by a glue which keeps flexible after drying up, which comprises stacking the sheets, laying between each sheet, when stacking same, a thread going alternately from right to left and from left to right, dressing the two opposite faces of the stack which correspond to the folds of the concertina folder, gluing said opposite faces of the stack, drying up the glue, placing the stack on a revolving plate, severing alternate opposite edges of the stack by pulling said thread in a continuous way, when rotating the plate, by means of a winder comprising a bobbin and a friction cylinder actuating the bobbin.

6. A method for manufacturing a folder of the concertina type consisting of individual sheets of paper, united alternately at their outer front and rear edges which latter corresponds to the folds of the concertina folder comprising the steps of piling the individual sheets of paper into a stack, trimming the front and rear edges of said stack, coating said trimmed edges of the stack with a glue that remains flexible after drying and severing the alternate opposite glued edges of the sheets of paper of the entire stack whereby the remaining glued edges of the sheets permit the latter to be expanded.

7. A folder of the concertina type comprising a series of pads each consisting of a plurality of sheets of paper, said pads each having a pair of opposed straight parallel edges, a film of a glue which remains flexible after drying extending over the opposed parallel edges of each pad whereby said sheets of paper are detachably connected together, and hinges formed by said film of glue extending across and between alternate pairs of edges of said series of pads.

MAURICE FLAMENT.

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